A Long-Term Survival Guide - Make A Survival Staff:

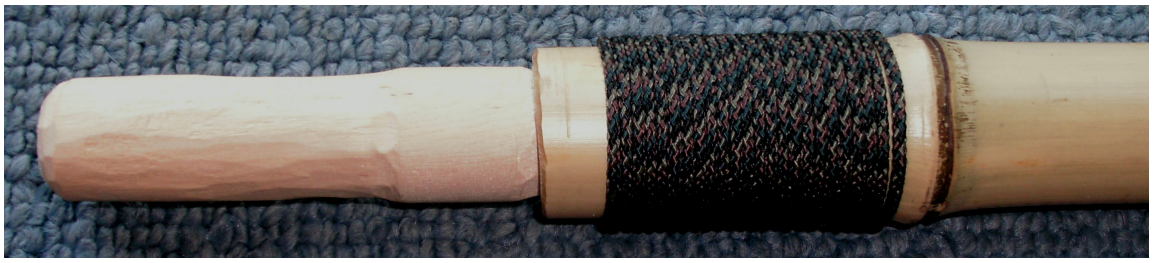
A hiking staff is useful when travelling on foot, because it helps you maintain your balance on uneven ground, and when carrying a heavy pack. I like to make my own gear, so I came up with this design for a hollow survival staff, which has a few handy survival tools concealed inside.

Tool number one is a spearhead, which hides inside the staff until needed.

I chose bamboo for this example, because it is already hollow, looks attractive, can be found in a variety of sizes, and I like bamboo. There are other materials which can be used to make a similar staff, such as PVC pipe and metal electrical conduit, so it is easy to modify this idea, as desired.

I like to make my own spearheads and arrowheads from spade drill bits, by reshaping them on a bench grinder. Having a variety of widths available allows you to choose one which fits inside your staff easily. The spearhead is epoxied into a wooden fore shaft, which is whittled to just fit into the end of the staff, with a tight friction fit. The double-ended version is easier to pull from the shaft, and its longer length also doubles as a handle, allowing you to use the spearhead as a dagger.

The smaller plug fits flush in the end of the staff, and is removed using the cord loop, but is harder to remove in a hurry, so if you prefer this style of fore shaft, it should be made to have a looser fit.



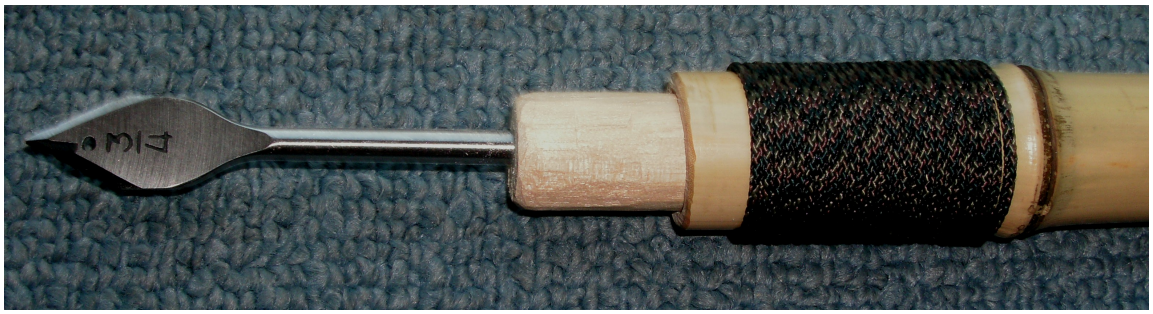
Lashing the end of the staff keeps the bamboo from splitting, when spearing a target.

The outside of the staff is used to store cordage, including fishing line, kite string, snare wire, paracord, and small-diameter rope. Each section of bamboo between two nodes makes a natural partition for winding cordage onto, and it will not slip off, because the joints flare out just a bit. You can lash multiple layers of cordage over each other, such as a layer of fishing line covered by string, which is then covered by paracord. I also prefer to add short lashings to the ends of the bamboo staff, to help prevent splitting, which can happen due to repeated impact stress.

The inner node walls will have to be drilled out, to make room for the spear and tools.

For a staff of this type, a larger diameter provides more internal storage space, so it is best to use the largest size that you can hold comfortably. A one inch inside diameter is about the minimum size that you can store a variety of useful items within, and one and one half inches gives you a lot more possible storage options. Use a staff with too small a diameter, and you may have to use an ice pick as your spear, and store narrow items inside, like the flint from a magnesium firestarter.

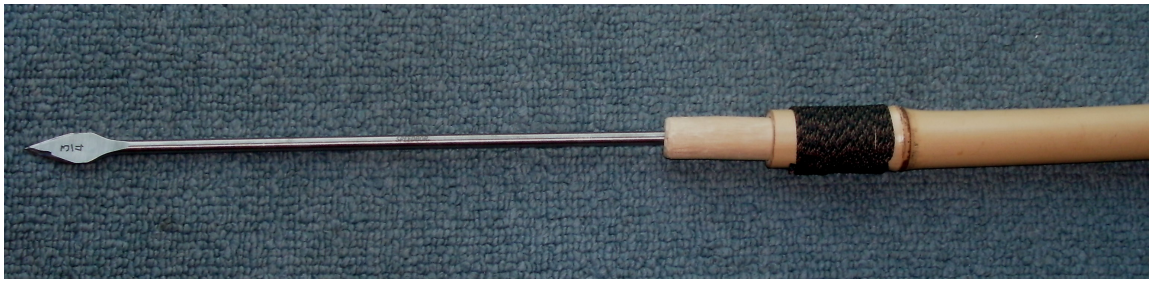
The flush-fitting plug looks nicer than the double-ended plug, but is harder to remove.



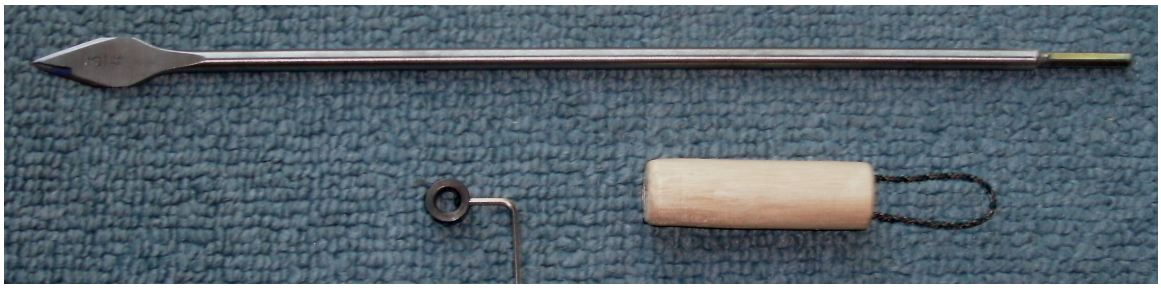
The flush plug fore shaft shown here is not fully seated (so it is visible for the picture).

Once the spear is concealed in the staff using the flush plug, the only way to remove it is by pulling on the cordage loop, which can be difficult, if the friction fit was made too tight.

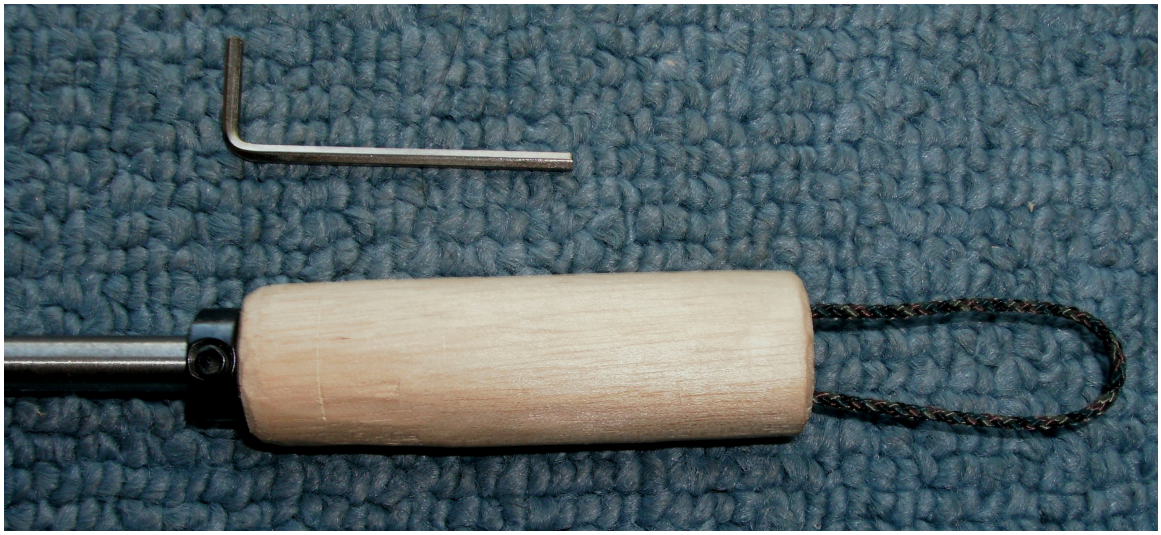
If you thought that the spearhead was too short for use against larger targets, such as bears, you can make a longer spearhead from an extended spade drill bit; these are usually 16 inches long. This style of spearhead makes the staff into a very effective weapon, with maximum penetration.



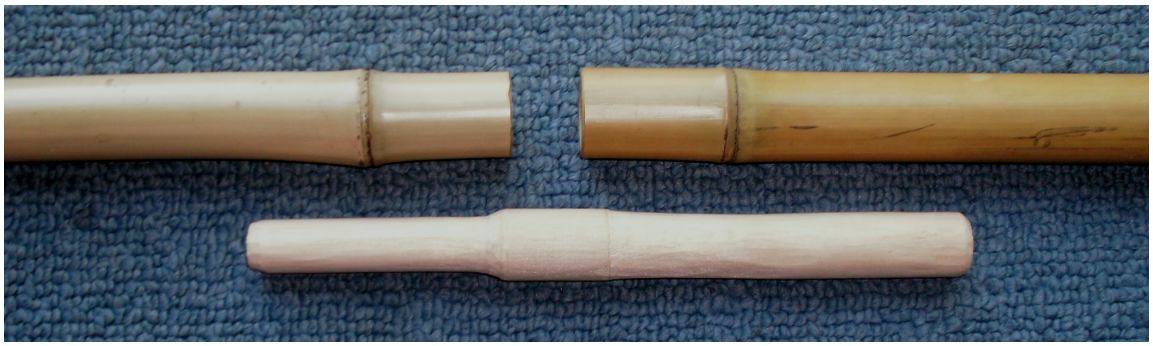
The 16 inch extended spearhead is nice, but the shaft can also be cut shorter, if desired.



To prevent your spear shaft from being driven back through the wooden fore shaft, by repeated impacts, you can add a small metal ring, called a shaft collar, which is available at most hardware stores. It clamps onto the spear shaft with an allen screw. These rings are also known as drill stops.



Close-up of shaft collar, showing how it is placed on the spear shaft, against the plug.

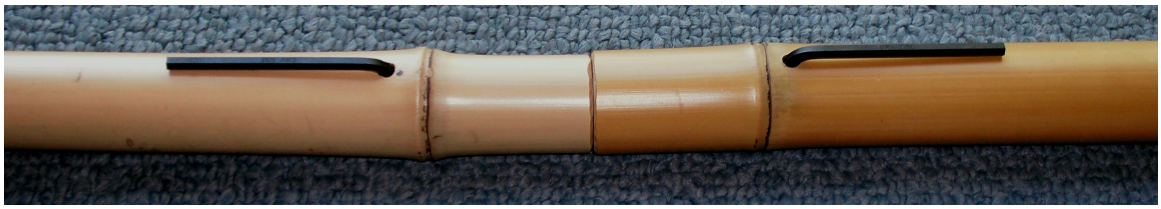


A staff made from a single length of bamboo, or other material, makes for the strongest hiking stick, but you can also make your staff from two or more sections, if you prefer. This example was made using two sections, just to show one way of joining the two halves (using an internal plug). Bamboo canes tend to be slightly irregular; they are seldom perfectly straight, or perfectly round in cross-section. Wall thickness also varies considerably, even from one end of a cane to the other. This can make finding a suitable staff a bit of a challenge, but the natural look is very appealing.

The internal plug connector is carefully whittled down, to fit snugly in the ends of the sections.

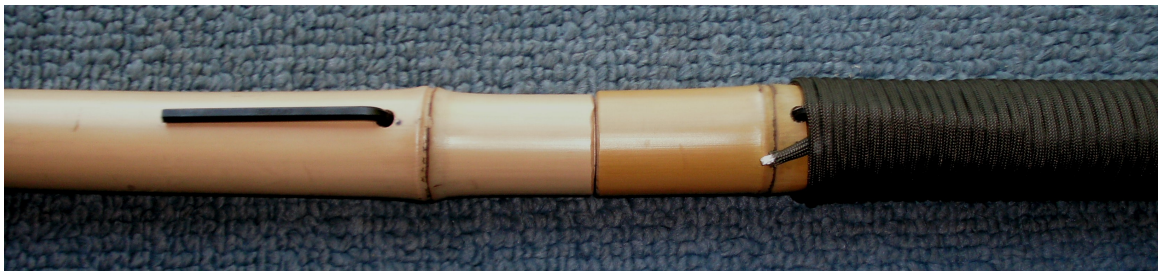
When fitted correctly, the staff sections completely cover the internal connecting plug.

The easiest way to lock the sections together, is by pinning them to the internal plug. If sections are not perfectly straight, twist them around for best alignment, before drilling and pinning them.

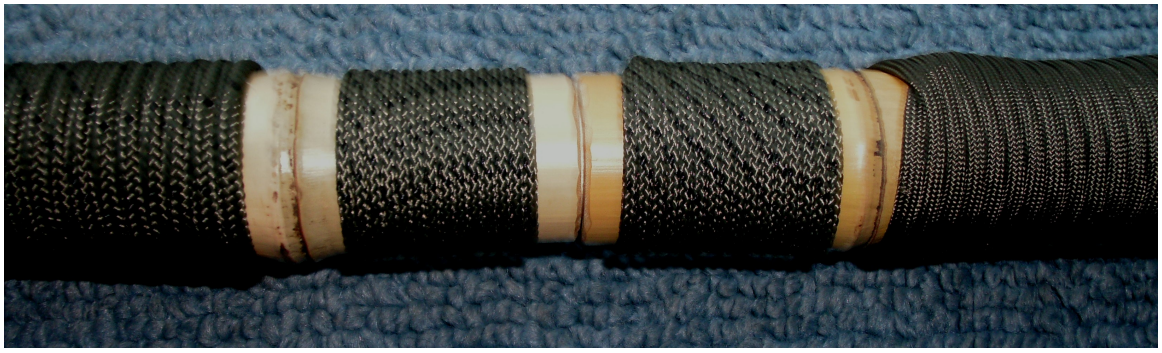


I like to use allen wrenches as my locking pins, and then lash them in place with cordage.

There are other ways to join staff sections, such as by using epoxy to glue threaded copper pipe connectors to the ends, so that the sections can be screwed together, but I prefer to use the pins. You don't have to use allen wrenches either; pins can be made from wire, wood or bamboo, or the sections and plug can be drilled all the way through, and lashed through the holes with cordage. Similar pins can be used to fasten the spear, and a plug at the other end of the staff, if desired.

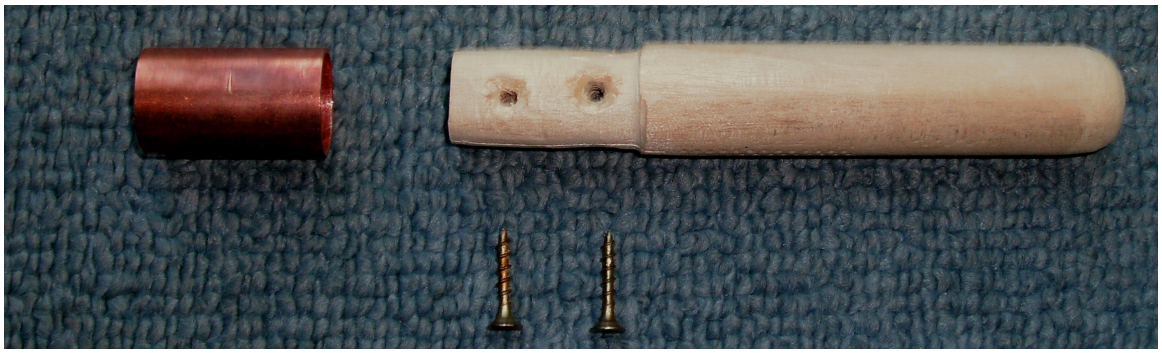


Here one of the allen wrench pins has been secured in place, using a paracord lashing.



The completed joint, showing the allen wrench lashings, and the small lashings at the ends.

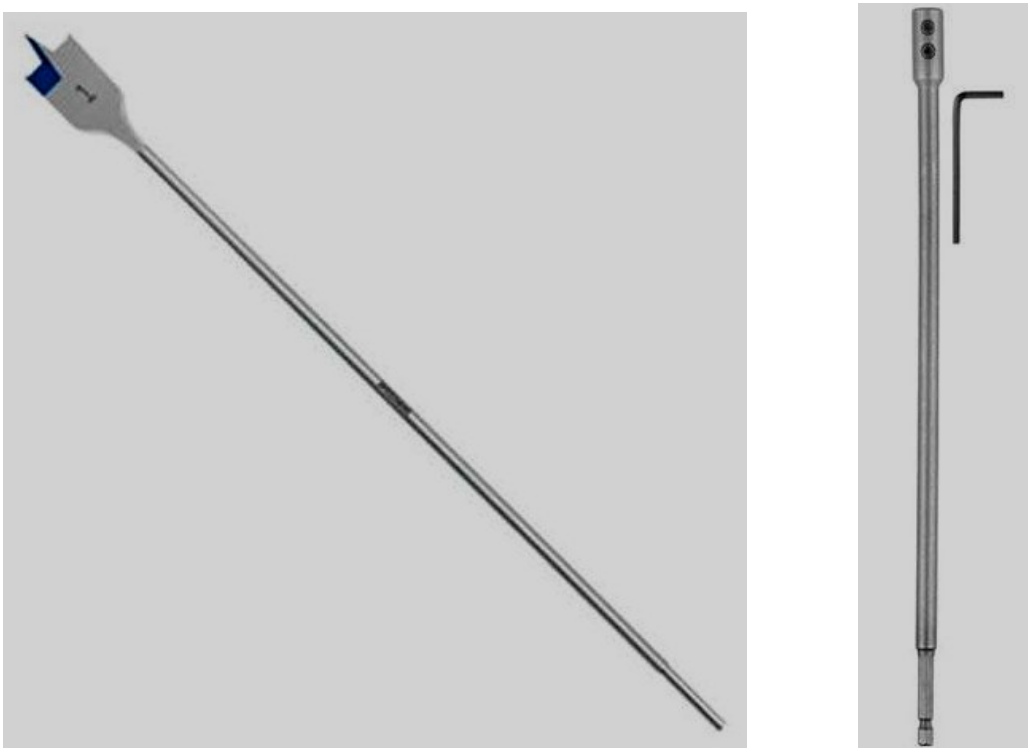
Another useful staff tool is this slender saw, which is made from a narrow sawzall blade.



This saw is easily made, by cutting a slot in one end of the dowel handle for the saw blade, drilling a second hole in the base of the saw blade (so that two screws can be used), whittling the dowel end down enough so that a copper pipe fitting will fit over the screws, and then assembling. You can also use epoxy. Of course the handle must be slender enough to fit into the staff storage cavity.

For efficient use of space, the saw blade and spearhead can be arranged to overlap, inside the staff. I used a wood pruning blade for my saw, but you can substitute any other saw blade, if you prefer.

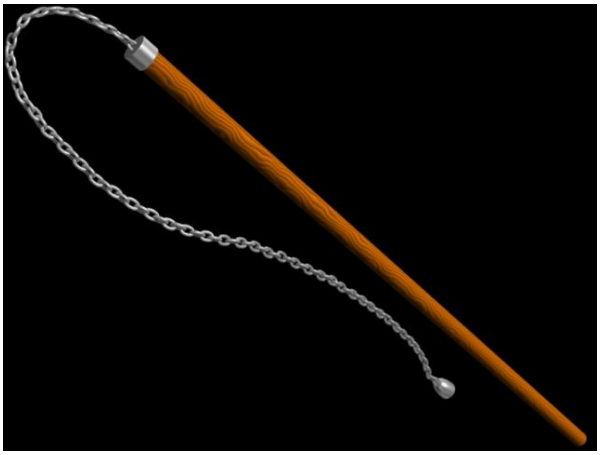
Other tools: Any small knife, whose profile is slender enough to fit into your staff, makes a good addition to your staff tools (knives can be reshaped, or re-handled, to fit better, if desired). Plastic match safes can be stored in the staff, if it is large enough, and they can contain small but useful survival items, such as fish hooks and sinkers, sewing needles, medication, or even matches. Other items that you could add to your staff tools include a cigarette lighter or other small fire starter, an LED penlight, a button compass (or zipper-pull compass), and a loud signaling whistle.



Sixteen inch speedbor spade drill bit, and twelve inch drill bit extension.

One easy way to remove the interior partitions found at each bamboo joint is by drilling them out, using an extended drill bit, like the one used to make the long spearhead. The drill bit can be made even longer, using standard drill bit extensions. Partitions can also be knocked out, or punched out, using a long stick, pipe, or smaller bamboo pole, and a hammer (or hammer stone). Sandpaper can be glued onto a long stick, and used to smooth out the interior, to remove any remaining ridges.

Other Weapons: Historically, staffs and canes have often been used to conceal swords and other weapons. A six foot staff could contain a three foot sword, while still having room for other tools. Small blowguns, and homemade single-shot firearms (zip guns) are some other possible choices. Part of the fun of the survival staff idea is customizing your own staff, to hold the tools you want.



Weighted Chain: A flexible weapon, such as this chain with a metal weight on each end, is another item that can be stored in a survival staff. This weapon can also be secured to one end of the staff, so that it slides out when needed, and the staff becomes a mace and chain. This is done by fitting the chain through a plug with a hole in the center, which lets the chain slide through, but not the weights on each end. The plug is secured in place, allowing the chain to be whipped out quickly.

Other Ideas: You can secure one or more small pouches to the outside of your survival staff, to increase carrying capacity, if you wish. I like to lash a small knife to the outside of my staff, and keep a second one stored inside, as well. Small items, and flat items (such as hacksaw blades) can also be tied to the outside of the staff, and then covered by a layer of cordage lashings. It is even possible to take a thin nylon poncho, wrap it around the staff, and then cover it with cordage. The poncho serves as rain gear, and a minimal shelter (the poncho bivy). You can do the same thing with a mylar space blanket, or space blanket sleeping bag, but the nylon poncho is more durable.

Torch Staff: A small oil lamp can be made from pipe fittings, or a copper stubout, and a fiberglass wick from a tiki torch. This little lamp can be mounted on the end of your staff, for a light source, and it can also be used to help get a campfire started, if your firewood is damp from recent rains.

Hydration Staff: Bamboo sections are natural containers, and they have been used as canteens, cups, and cooking pots for centuries. Part (or all) of the interior of your survival staff can be used for carrying water, either using the natural bamboo, or by lining the staff with plastic water pipe. To use natural bamboo, drill a hole in the top end, then use a stick to knock out any partitions that need to be removed. Bamboo has a thin, paper-like lining inside, which has to be removed. One way to do this is by putting some sand and water in the bamboo, and shaking it to sand away this lining. Once the interior is clean, your water container can be filled and corked. Natural containers may give water an unusual taste, but bamboo is perfectly safe to drink from. Plastic pipe can be capped, plugged, or sealed with silicone caulking on the bottom. The top can be fitted with a threaded plug or cap, or just a large cork, or wooden plug. The top can also be drilled, so that a drinking tube can be used.

A six foot staff could hold as much as a gallon of water, if it is large enough in diameter, and one gallon of water weighs eight pounds. This may seem like a lot of extra weight to carry, but it should be a priority in arid and desert environments. Also, your staff will get lighter every time you take a drink. You can also use just a portion of your staff for water storage, or carry it partially full. Plastic tubing can be used as a straw, to make drinking from the staff easier.

The survival staff is a simple idea, but it can come in handy while on the trail. If you customize your own staff to suit your personal preferences, you can have a hiking companion that you can depend on, when you need it the most. Just be careful not to break any concealed weapons laws.